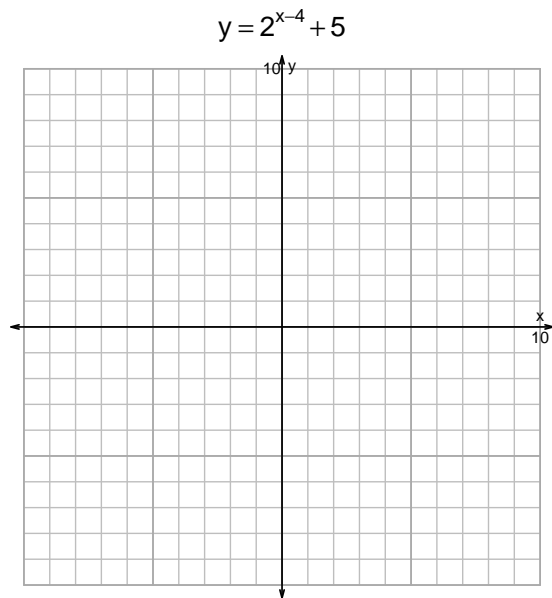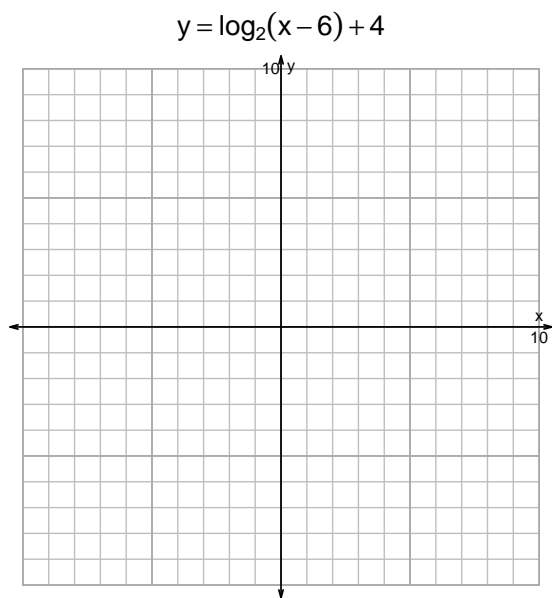Name: _____   Date: _____

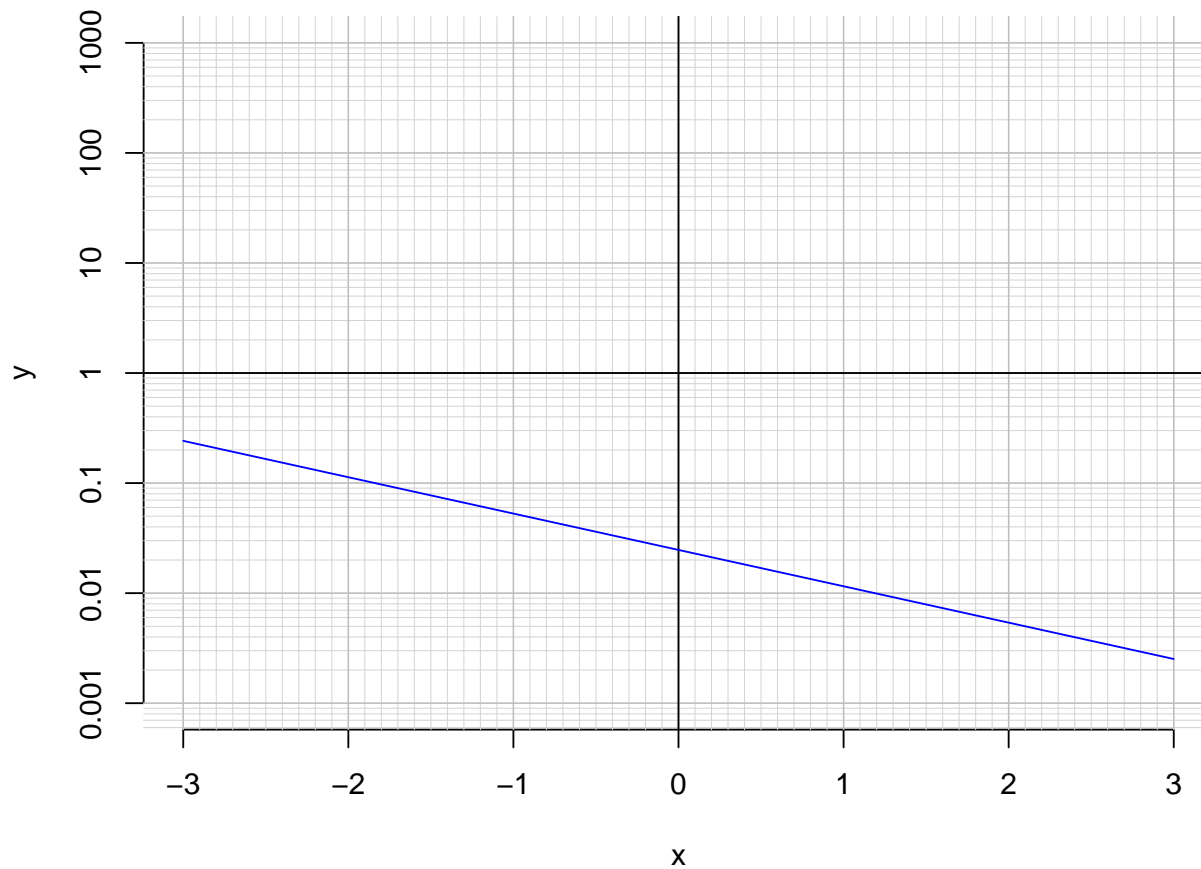## s18quiz: EXP LOG (Practice v139)

1. Graph $y = \log_2(x - 6) + 4$ and $y = 2^{x-4} + 5$ on the grids below. Also, draw any asymptotes with dotted lines.

$$y = \log_2(x - 6) + 4$$

$$y = 2^{x-4} + 5$$

2. Write (but do not evaluate) the solution to the equation below by writing a logarithmic expression.

$$-19 = \left(\frac{-5}{4}\right) \cdot 2^{3t/7}$$

3. An exponential function $f(x) = 0.0247 \cdot e^{-0.761x}$ is graphed below on a semi-log plot.

a. Using the plot above, evaluate $f(-1.7)$.

b. Express $f^{-1}(x)$, the inverse of f.

c. Using the plot above, evaluate $f^{-1}(0.005)$.